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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,515	09/15/2000	Dale Scott Crombez	200-0029	2771

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SOUTHFIELD, MI 48075

EXAMINER

GONZALEZ, JULIO C

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

### Application No.

09/663,515

### Applicant(s)

CROMBEZ ET AL.

### Examiner

Julio C. Gonzalez

### Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 9-11, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brigham et al and Ibaraki et al and Kinugasa et al.

Brigham et al discloses a system for a hybrid vehicle, a piston driven engine as a main power unit (column 1, lines 17), determining an ON/OFF status of the unit (column 10, lines 8, 9, 13) and certain parameters threshold has to be set in order for the system to function efficiently (column 9, line 20).

However, Brigham does not disclose that the unit be kept ON when a threshold is exceeded or using ON/OFF parameters for a main unit.

On the other hand, Ibaraki discloses for the purpose of decrease running failure of hybrid vehicles that a unit may be kept ON or OFF depending on a certain threshold (column 9, lines 59-67).

However, neither Brigham nor Ibaraki disclose explicitly that the parameters are related to an auxiliary device.

On the other hand, Kinugasa et al discloses for the purpose of suppressing fluctuation in output torque that an auxiliary engine 20 is to be turned OFF if a value of a parameter exceeds a value (column 13, lines 36-38) and be turned ON if a value falls below a lower threshold value (column 14, lines 11-14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a hybrid vehicle as disclosed by Brigham et al and to modify the invention by setting OFF/ON threshold parameters for the purpose of decrease running failure of hybrid vehicles as disclosed by Ibaraki and to use the threshold values for an auxiliary system for the purpose of suppressing fluctuation in output torque as disclosed by Kinugasa et al.

3. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brigham, Ibaraki and Kinugasa et al as applied to claims 1 and 10 above, and further in view of Tanihata et al.

The combined hybrid vehicle discloses all of the elements above. However, the combined hybrid vehicle does not disclose using a brake booster vacuum sytem.

On the other hand, Tanihata et al discloses for the purpose of prohibiting the running state that an engine which drives power is not started that a brake booster vacuum system may be used in hybrid vehicles.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined hybrid vehicle as disclosed above and to modify the invention by using a brake booster vacuum for the purpose of prohibiting the running state that an engine which drives power as disclosed by Tanihata.

4. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brigham et al, Ibaraki et al and Kinugasa et al as applied to claims 1 and 10 above, and further in view of Iwashita et al.

The combined hybrid vehicle discloses all of the elements above. However, the combined hybrid vehicle does not disclose using a purge vapor system.

On the other hand, Iwashita discloses for the purpose of reducing environmental pollution that purge vapor system may be used in hybrid vehicles (see abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined hybrid vehicle as disclosed above

and to modify the invention by using a purge vapor system for the purpose of reducing environmental pollution as disclosed by Iwashita et al.

5. Claims 6, 8, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brigham et al and Ibaraki et al and Iwashita et al and Kinugasa et al as applied to claims 1, 7, 10 and 14 above, and further in view of Yoshida.

The combined hybrid vehicle discloses all of the elements above. However, the combined hybrid vehicle does not disclose using an air conditioning system and catalyst system.

On the other hand, Yoshida discloses for the purpose of providing a hybrid vehicle with satisfactory power performances, a catalyst (column 4, line 47), an A/C system 70, and heating system (see claim 15).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined hybrid vehicle as disclosed above and to modify the invention by using an A/C system discloses for the purpose of providing a hybrid vehicle with satisfactory power performances as disclosed by Yoshida.

*Response to Arguments*

6. Applicant's arguments with respect to claims 1-15, 21 and 22 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's arguments filed 09/19/02 have been fully considered but they are not persuasive.

Brigham et al discloses a system for a hybrid vehicle in which the system uses upper and lower threshold values and the system is determined to be turn ON or OFF depending on if the upper threshold value is exceeded or having the system turn ON if the state of charge is below the threshold value (column 2, lines 14-20). Also, the state of charge is directly linked to the auxiliary system, thus anyone with ordinary skill in the art would be able to implement the upper/lower threshold value system to an auxiliary device.

*Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).



Application/Control Number: 09/663,515  
Art Unit: 2834

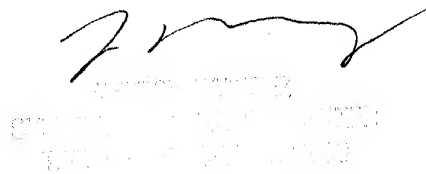
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

November 26, 2002

A handwritten signature in dark ink is positioned above a faint, circular official stamp. The signature appears to be "J. Ramirez". The stamp is mostly illegible but seems to contain some text and a central emblem.